

Amendments to the Claims

This listing of claims will replace the prior version of the claim in the present application:

Listing of Claims:

1-24. (Canceled)

25. (New) A fluid dynamic pressure bearing apparatus comprising:

a shaft;

a thrust plate fixed at one end of the shaft;

a bearing member having a bore, the thrust plate and a portion of the shaft being accommodated in the bore in a relatively rotatable manner with respect to each other;

a radial dynamic pressure bearing formed in a gap portion between a outer circumferential surface of the shaft and an inner circumferential surface of the bore confronting thereto;

a first thrust bearing portion formed between a top surface of the thrust plate and a first facing member opposed thereto in the axial direction, the first facing member being a portion of the bearing member, dynamic pressure generating grooves formed either on a top surface of the thrust plate or on the first facing member;

a second thrust bearing portion formed between a bottom surface of the thrust plate and a second facing member opposed thereto in the axial direction, the second facing member being a portion of the bearing member, dynamic pressure generating grooves formed either on a bottom surface of the thrust plate or on the second facing member, the first thrust bearing portion and the second thrust bearing portion composing a thrust dynamic pressure bearing;

lubricating fluid filling the first thrust bearing portion, the second thrust bearing portion and the radial dynamic pressure bearing; wherein:

a gap space (L1) of the first thrust bearing portion is larger than a gap space (L2) of the second thrust bearing portion during a normal rotating state;

the depth of the dynamic pressure generating grooves of the first thrust bearing portion is larger than that of the second thrust bearing portion;

the depth of the dynamic pressure generating grooves in the first bearing portion is adjusted so that the coefficient of elasticity of the first thrust bearing portion has about maximum value under predetermined (L1); and

the depth of the dynamic pressure generating grooves in the second bearing portion is adjusted so that the coefficient of elasticity of the second thrust bearing portion has about maximum value under predetermined (L2).

26. (New) The apparatus according to claim 25, wherein the lubricating fluid is air.

27. (New) The apparatus according to claim 25, wherein the lubricating fluid is lubricating oil.

28. (New) The apparatus according to claim 25, wherein the grooves of the thrust dynamic pressure bearing are arranged in a herringbone pattern.

29. (New) The apparatus according to claim 25, wherein the grooves of the thrust dynamic pressure bearing are arranged in a spiral pattern.

30. (New) The apparatus according to claim 27, wherein the depth of the dynamic pressure generating grooves of the second thrust bearing portion is in the range of about 0.8 times to about 2.8 times the gap space of the second thrust bearing portion.

31. (New) The apparatus according to claim 25, further comprising:
a biasing means for urging the rotation member toward the fixed member to make the rotation member elevate from the fixed member at startup, the biasing means including a magnet and a magnetic attraction plate for urging the rotation member toward the fixed member at startup; wherein:

the second facing member is formed from a material harder than the first facing member.